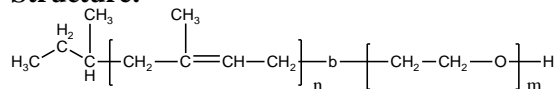


Sample Name:
Poly(1,4-isoprene)-b-poly(ethylene oxide)

Sample #: **P18864C-IPEO**

Structure:



Composition:

| | |
|----------------------------------|-------------|
| Mn x 10 ³ PIP-b-EO | Mw/Mn (PDI) |
| 18.5-b-5.5 | 1.05 |

Synthesis Procedure:

Poly(Isoprene 1,4 addition or 1,2 addition)-b-ethylene oxide) can be prepared by anionic process.

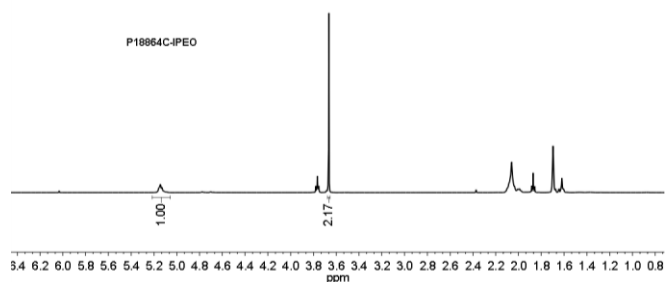
Characterization:

By SEC and HNMR.

Solubility:

Poly(isoprene-b-ethylene oxide) is soluble in THF, CHCl₃, and toluene. The polymer has variable solubility in hexane, methanol, ethanol and water depending on its composition.

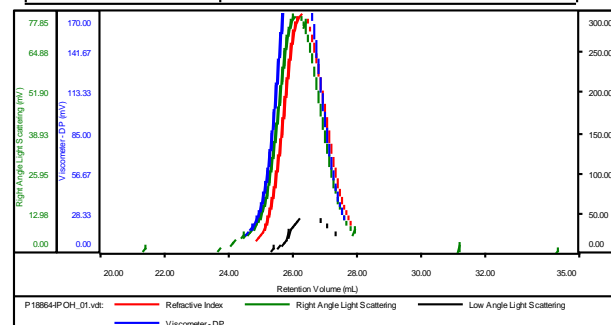
¹H NMR spectrum of the sample:



SEC profile of the block copolymer:

Sample ID: P18864-IPOH

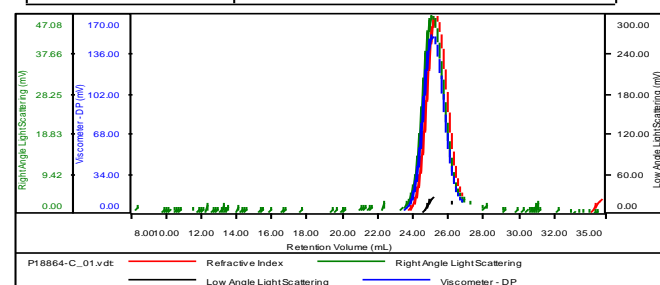
| | |
|-----------------------|--------------------------|
| Concentration (mg/mL) | 18.9229 |
| Sample dn/dc (mL/g) | 0.1200 |
| Method File | PS80K-0903-2014-0000.vcm |
| Column Set | 3x PL 1113-6300 |
| Solvent | THF |



| Sample | MW Number Average (Da) | MW Weight Average (Da) | MW at Peak (Da) | Polydispersity | Intrinsic Viscosity (dL/g) |
|--------------------|------------------------|------------------------|-----------------|----------------|----------------------------|
| P18864-IPOH_01.vdt | 18,682 | 20,988 | 18,505 | 1.123 | 0.3962 |
| | | | | | |

Sample ID: P18864C-IPEO

| | |
|-----------------------|--------------------------|
| Concentration (mg/mL) | 9.7639 |
| Sample dn/dc (mL/g) | 0.1080 |
| Method File | PS80K-0903-2014-0000.vcm |
| Column Set | 3x PL 1113-6300 |
| Solvent | THF |



| Sample | MW Number Average (Da) | MW Weight Average (Da) | MW at Peak (Da) | Polydispersity | Intrinsic Viscosity (dL/g) |
|-----------------|------------------------|------------------------|-----------------|----------------|----------------------------|
| P18864-C_01.vdt | 23,963 | 24,933 | 23,914 | 1.040 | 0.4654 |
| | | | | | |